JAVA.UTIL.HASHMAP CLASS

Introduction

The **java.util.HashMap** class is the Hash table based implementation of the Map interface.Following are the important points about HashMap:

- This class makes no guarantees as to the iteration order of the map; in particular, it does not guarantee that the order will remain constant over time.
- This class permits null values and the null key.

Class declaration

Following is the declaration for **java.util.HashMap** class:

```
public class HashMap<K,V>
   extends AbstractMap<K,V>
       implements Map<K,V>, Cloneable, Serializable
```

Parameters

Following is the parameter for **java.util.HashMap** class:

- **K** -- This is the type of keys maintained by this map.
- **V** -- This is the type of mapped values.

Class constructors

S.N.	Constructor & Description
1	**HashMap()** This constructs an empty HashMap with the default initial capacity (16) and the default load factor (0.75).
2	**HashMap(Collection<? extends E> c)** This constructs an empty HashMap with the specified initial capacity and the default load factor (0.75).
3	**HashMap(int initialCapacity, float loadFactor)** This constructs an empty HashMap with the specified initial capacity and load factor.
4	**HashMap(Map<? extends K,? extends V> m)** This constructs a new HashMap with the same mappings as the specified Map.

Class methods

S.N.	Method & Description
1	void clear()

	This method removes all of the mappings from this map.
2	Object clone() This method returns a shallow copy of this HashMap instance, the keys and values themselves are not cloned.
3	boolean containsKey(Object key) This method returns true if this map contains a mapping for the specified key.
4	boolean containsValue(Object value) This method returns true if this map maps one or more keys to the specified value.
5	Set<Map.Entry<K,V>> entrySet() This method returns a Set view of the mappings contained in this map.
6	V get(Object key) This method returns the value to which the specified key is mapped, or null if this map contains no mapping for the key.
7	boolean isEmpty() This method returns true if this map contains no key-value mapping.
8	Set<K> keySet() This method returns a Set view of the keys contained in this map.
9	V put(K key, V value) This method associates the specified value with the specified key in this map.
10	void putAll(Map<? extends K,? extends V> m) This method copies all of the mappings from the specified map to this map.
11	V remove(Object key) This method removes the mapping for the specified key from this map if present.
12	int size() This method returns the number of key-value mappings in this map.
13	Collection<V> values() This method returns a Collection view of the values contained in this map.

Methods inherited

This class inherits methods from the following classes:

- java.util.AbstractMap
- java.util.Object
- java.util.Map